"Ja

$\textbf{Neutrokine-}\alpha$

	AAATTCAGGATAACTCTCCTGAGGGGTGAGCCAAGCCCTGCCATGTAGTGCACGCAGGAC	60
61	ATCAACAAACACAGATAACAGGAAATGATCCATTCCCTGTGGTCACTTATTCTAAAGGCC	120
121	CCAACCTTCAAAGTTCAAGTAGTGATATGGATGACTCCACAGAAAGGGAGCAGTCACGCC M D D S T E R E Q S R L	180 12
181 13	TTACTTCTTGCCTTAAGAAAAGAGAAGAAATGAAACTGAAGGAGTGTGTTTCCATCCTCC T S C L K K R E E M K L K E C V S I <u>L P</u> CD-I	240 32
241 33	CACGGAAGGAAAGCCCCTCTGTCCGATCCTCCAAAGACGGAAAGCTGCTGGCTG	300 52
301 53	TGCTGCTGCACTGCTGTCTTGCTGCCTCACGGTGGTGTCTTTCTACCAGGTGGCCGCCC L L A L L S C C L T V V S F Y Q V A A L	360 72
361 73	TGCAAGGGGACCTGGCCAGCCTCCGGGCAGAGCTGC Q G D L A S L R A E L Q G H H A E K L P CD-II	420 92
421 93	CAGCAGGAGCAGGAGCCCCCAAGGCCGGCCTGGAGGAAGCTCCAGCTGTCACCGCGGGAC A G A G A P K A G L E E A P A V T · A G L CD-III	480 112
	TGAAAATCTTTGAACCACCAGCTCCAGGAGAAGGCAACTCCAGTCAGAACAGCAGAAATA K I F E P P A P G E G N S S Q N S R N K	
541 133	AGCGTGCCGTTCAGGGTCCAGAAGAAACAGTCACTCAAGACTGCTTGCAACTGATTGCAG R A V Q G P E E T V T Q D C L Q L I A D CD-IV	600 152

FIG.1A

Neutrokine- α

601 153	ACAGTGAAACACCAACTATACAAAAAGGATCTTACACATTTGTTCCATGGCTTCTCAGCT S E T P T I Q K G S Y T F <u>V P W L L S F</u> CD-V	660 172
661 173	TTAAAAGGGGAAGTGCCCTAGAAGAAAAAGAGAAAATATTGGTCAAAGAAACTGGTT K R G S A L E E K E N K I L V K E T G Y CD-VI	720 192
721 193	ACTTTTTTATATATGGTCAGGTTTTATATACTGATAAGACCTACGCCATGGGACATCTAA FFIYGQVLYTDKTYAMGHLI CD-VII CD-VII	780 212
781 213	TTCAGAGGAAGAAGGTCCATGTCTTTGGGGGATGAATTGAGTCTGGTGACTTTGTTTCGAT Q R K K V H V F G D E L S L V T L F R C CD-VII #	840 232
841 233	GTATTCAAAATATGCCTGAAACACTACCCAATAATTCCTGCTATTCAGCTGGCATTGCAA I Q N M P E T L P N N <u>S C Y S A G</u> I A K CD-VIII CD-IX	900 252
901 253	AACTGGAAGAAGGAGATGAACTCCAACTTGCAATACCAAGAGAAAATGCACAAATATCAC L E E G D E L Q L A I P R E N A Q I S L CD-X	960 272
961 273	TGGATGGAGATGTCACATTTTTTGGTGCATTGAAACTGCTGTGACCTACTTACACCATGT D G D V <u>T F F G A L K L</u> L CD-XI	1020 285
1021	CTGTAGCTATTTTCCTCCCTTTCTCTGTACCTCTAAGAAGAAAGA	1080
1081	CCAAAAAAAAAAAAAA 1100	

FIG.1B

20 A A 		Neutrokine alphaSV
N	M S T E S M I R D V E L	

FIG.2A

TNFalpha TNFbeta LTbeta FasLigand Neutrokine alpha	TNFalpha TNFbeta LTbeta FasLigand Neutrokine alpha	TNFalpha TNFbeta LTbeta FasLigand Neutrokine alpha
100 110 120 1 G A Q G L P G V G L	130 140 150 150 150 150 1 TPS - PLA - QAVRSSSRTPSD KPVA 2 GAQAQQ - GLGFQKLPEEPETDLSPGLPAA 20 QMHTAS - SLE - KQIGHPSPPPEKKELRKVA 18 PAPGEGNSSQNSRNKRAVQGPEETVTQDCL 18 PAPGEGNSSQNSRNKRAVQGPEETVTQDCL	160 170 170 180 H V V A N P Q A E G - Q C Q W L N R R A N A L L H L I G D P S K Q N - S L G W E T I K E Q A F L H L I G A P L K - G Q G L G W E T I K E Q A F L H L T G K S N S R S M P L E W E D I Y G I V L L H Q L I A D S E T P T I Q K G S Y T F V P W L L S F K H L T G S Y T F V P W L L S F K
38 31 32 90 88 88	66 41 62 120 118	91 66 91 148 148

FIG.2B

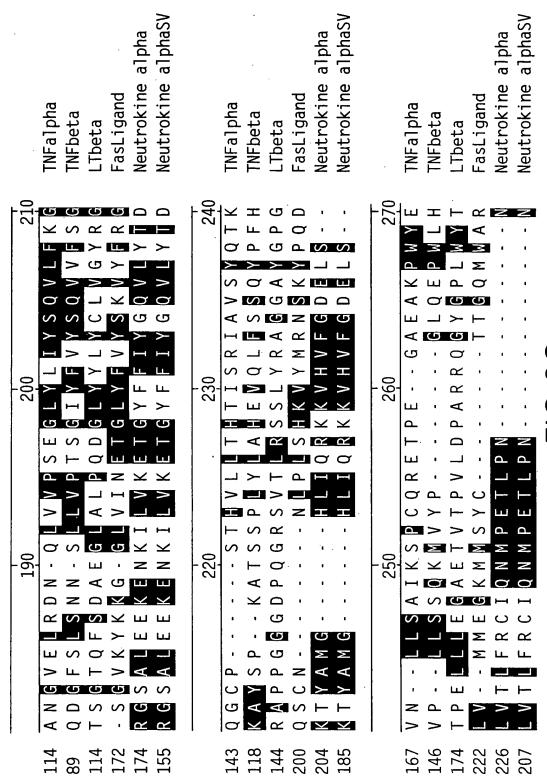


FIG.2C

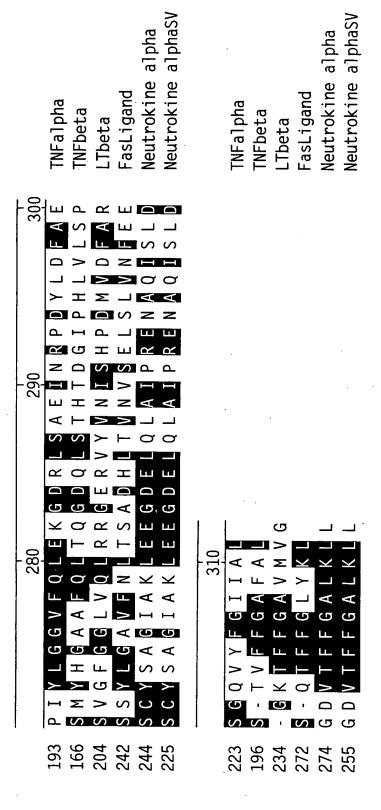
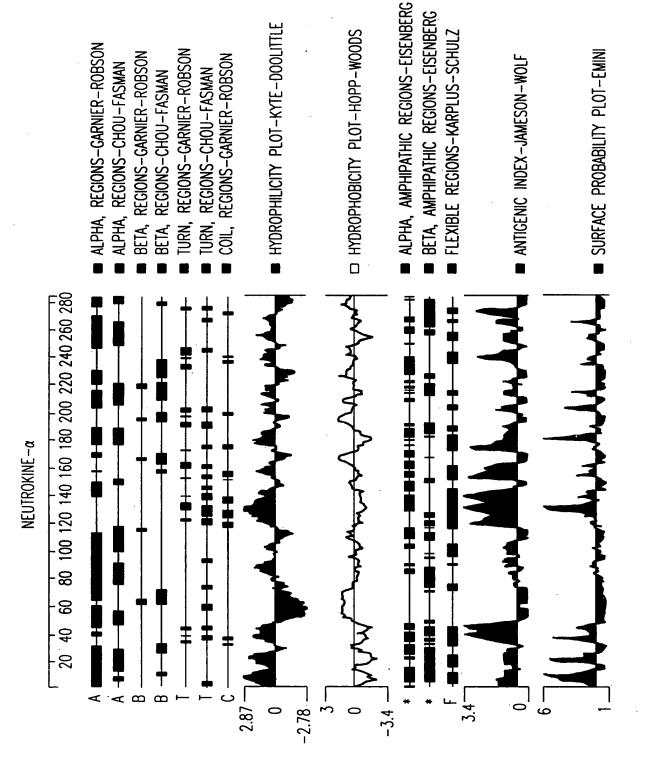


FIG. 2D





	1				50
HSOAD55R			CCTGAGGGGT		
HNEDU15X			CCTGAGGGGT		CTGCCATGTA
HSLAH84R		NAGNAAACTG			CAGGTTTTAT
HLTBM08R	AATTCGGCAC	GAGCAAGGCC	GGCCTGGAGG	AAGCTCCAGC	TGTCACCGCG
	51			,	100
HSOAD55R	GTGCACGCAG	GACATCANCA	A. ACACANN	NNNCAGGAAA	
HNEDU15X			AACACAGA		
HSLAH84R	ATACTGATAA	GACCTACGCC	ATGGGACATC	TAGTTCAGAG	GAAGAAGGTC
HLTBM08R	GGACTGAAAA	TCTTTGAACC	ACCAGCTCCA	GGAGAAGGCA	ACTCCAGTCA
	101				150
HSOAD55R		CTTATTCTAA	AGGCCCCAAC	CTTCAAAGTT	
HNEDU15X			AGGCCCCAAC		
HSLAH84R			GAGTCTGGTG		0, 0 to 1, 10, 10, 1
HLTBM08R			CCGTTCAGGG		
	151	•			200
LICOADEED	151	TCCACACAAA	COCACCACTC	ACCCCTTACT	200
HSOAD55R			GGGAGCAGTC		
HNEDU15X			GGGAGCAGTC		
HSLAH84R HLTBM08R			CCAATAATTC GCAGACAGTG		
TL I DINUOK	AAGACIGCII	GCAACTGNTT	GUAGACAGIG	AAACACCAAC	TATACAAAA
	201				250
HSOAD55R	AGAAAAGAGA	AGAAATGAAA	CTGNAAGGAG	TGTGTTTCCA	TCCTCCCACG
HNEDU15X	AGAAAAGAGA	AGAAATGAAA	CT.GAAGGAG	TGTGTTTCCA	TCCTCCCACG
HSLAH84R	CAAAACTGGN	AGGAAGGA	GATGAAC	TCCAACTTGC	AATACCAGGG
HLTBM08R	GGCTCCCTTC	TGNTGCCACA	TTTGGGCCAA	GGAATGGAGA	GATTTCTTCG
	251				300
HSOAD55R		CCCTCTNTCC	GATCCTCCAA	ΑGΔCGGΔΔΔG	
HNEDU15X			GATCCTCCAA		
HSLAH84R			GGGATGGAGA		
HLTBM08R			CTCTTCAGAT		
	301			•	250
HSOAD55R		CNITCCCATTC	TGTTCTTGCT	CNICTOAACCT	350
HNEDU15X			CTGTCTTGCT		
HSLAH84R			NCTTACANCA		
HLTBM08R			GATTNACANCA		
TILIBITOOK	ON MULITARY	TOTOTACTIA	UATTIACACA	THUTTOUR	Tudulinicii
HCOADEED	351				400
HSOAD55R HNEDU15X	TACCACCTCC	CCCCCTCCA	ACCCCACCTC	CCCACCCTCC	CCCCACACCT
HSLAH84R			AGGGGACCTG TCTTAGGAAG		
	AAGTTTTAAA				

HS0AD55R	401				450
HNEDU15X HSLAH84R HLTBM08R	ATAACCCAAA	CACGCGGAGA AAAANNTTAA	ANGGGTANGN	AGGAGCAGGA GNNANANGNG AGGTTTNTAT	GGGNNGTTNN
LICOADEED	451				500
HSOAD55R HNEDU15X HSLAH84R HLTBM08R	CCGGCCTGGA CNNGNNGNNT	TTTNGGNNTA	GCTGTCACCG TNTTNTNNTN	CGGGACTGAA GGGNNNNGTA NCNNTCTTTT	AAAATGGGGC
LICOADEED	501				550
HSOAD55R HNEDU15X HSLAH84R HLTBM08R	CNANGGGGGN	ттт		CAGAACAGCA	
TILTBITOOK	551	••••••		••••••	
HSOAD55R HNEDU15X	TGCCGTTCAG	GGTCCAGAAG	AAACAGTCAC	TCAAGACTGC	TTGCAACTGA
HSLAH84R HLTBM08R					
LICOADEED	601				650
HSOAD55R HNEDU15X HSLAH84R	TTGCAGACAG	TGAAACACCA	ACTATACAAA	AAGGATCTTA	CACATTTGTT
HLTBM08R					
HS0AD55R	651				700
HNEDU15X HSLAH84R	CCATGGCTTC	TCAGCTTTAA	AAGGGGAAGT	GCCCTAGAAG	AAAAAGAGAA
HLTBM08R				• • • • • • • • • • • • • • • • • • • •	
HSOAD55R	701				750
HNEDU15X HSLAH84R		GTCAAAGAAA	CTGGTTACTT	TTTTATATAT	GGTCAGGTTT
HLTBM08R				• • • • • • • • • • • • • • • • • • • •	
HSOAD55R	751				800
HNEDU15X HSLAH84R	TATATACTGA	TAAGACCTAC	GCCATGGGAC	ATCTAATTCA	
HLTBM08R				• • • • • • • • • • • • • • • • • • • •	

LICOADEED	801				850
HSOAD55R HNEDU15X	GTCCATGTCT	TTGGGGATGA	ATTGAGTCTG	GTGACTTTGT	TTCGATGTAT
HSLAH84R HLTBM08R		••••••			
	851				900
HSOAD55R HNEDU15X	TCAAAATATG	CCTGAAACAC	TACCCAATAA	TTCCTGCTAT	TCAGCTGGCA
HSLAH84R HLTBM08R		••••••			
	901				950
HSOAD55R HNEDU15X	TTGCAAAACT	GGAAGAAGGA	GATGAACTCC	AACTTGCAAT	ACCAAGAGAA
HSLAH84R HLTBM08R		• • • • • • • • • • • • • • • • • • • •			
	951				1000
HSOAD55R HNEDU15X	AATGCACAAA	TATCACTGGA	TGGAGATGTC	ACATTTTTTG	GTGCATTGAA
HSLAH84R HLTBM08R		•••••••			
	1001	·			1050
HSOAD55R HNEDU15X	ACTGCTGTGA	CCTACTTACA	CCATGTCTGT	AGCTATTTTC	
HSLAH84R HLTBM08R	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •
	1051				1100
HSOAD55R HNEDU15X		AAGAAGAAAG			
HSLAH84R HLTBM08R		• • • • • • • • • • • • • • • • • • • •			
	1101				
HSOAD55R HNEDU15X	AAAAAA				
HSLAH84R HLTBM08R				•	

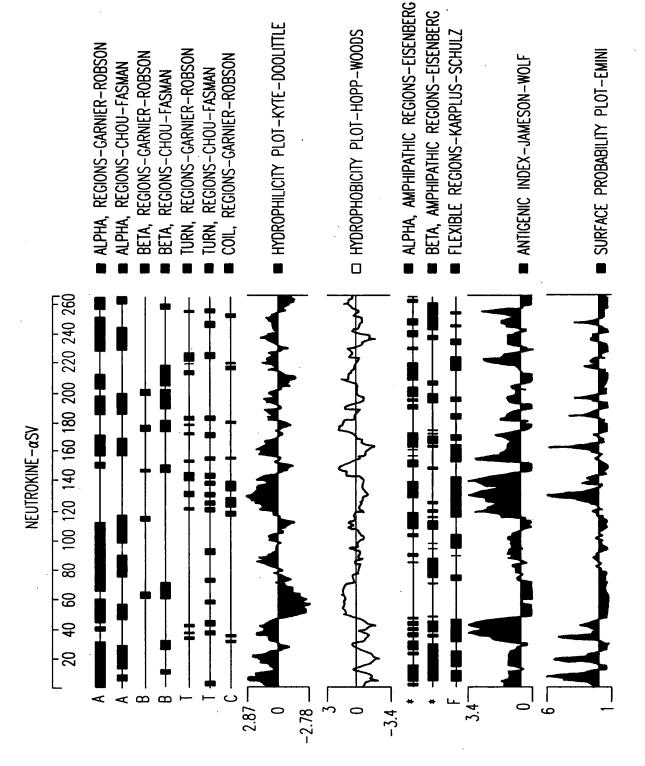
Neutrokine- α SV

1 1		igat(D [GACTO S	CCAC T	AGA E	AAG R	GGA E	GCA Q	GTC S	ACG R	CCT L	TAC T	TTC S	TTG C	CCT L	TAA K	G AA K	AAG R	agaa E	60 20
61 21			4AAC (L	TGAA K	AGG/A E	NGTG C	TGT V	TTC S	CAT I	CCT <u>L</u>	CCC P	ACG R	K	GGA E CD-	S	CCC <u>P</u>	CTC S	TGT V	CCGA R	120 40
121 41	<u>S</u>	TCC/ S I D-I	<u>(D</u>		AAA K	IGCT L	GCT L	GGC A	TGC A	AAC T	СТТ <u>L</u>	GCT L	GCT L	GGC A	ACT L	GCT L	GTC S	TTG C	CTGC C	180 60
181 61		ACG(T		TGTC S	ТТТ <u>F</u>	CTA Y	CCA Q		GGC A	•	CCT <u>L</u>	GCA Q	AGG <u>G</u>	GGA D	<u>L</u>	GGC A - I I		CCT <u>L</u>	CCGG R	240 80
241 81		<u>E I</u>		AGGG G		CCA H	CGC A	GGA E	G AA K	GCT L	GCC P	AGC A	AGG <u>G</u>	AGC A	G	AGC A - I I	Р		GGCC A	300 100
301 101	GGC <u>G</u> CD - II	<u>L</u> E	GAGG/ E E	AAGC A	TCC P	AGC A	TGT V	CAC T	CGC A	GGG G	ACT L	GAA K	AAT I	CTT F	TGA E	ACC P	ACC P		TCCA P	360 120
361 121			•••	ACTO S	_	TCA Q	gaa N	CAG S	C A G R	AAA N	TAA K	GCG R	TGC A	CGT V	TCA Q	GGG G	TCC P	AGA E	agaa E	420 140
421 141			TCTT/ S Y	ACAC T	ATT F	TGT <u>V</u>	TCC P	ATG W	GCT L	TCT L	CAG S	F	TAA K -IV	R		aag <u>S</u>		CCT L	AGAA E	480 160
481 161		<u>K</u> [GAGA E N	ATAA K	TAAV <u>I</u>	ATT L	GGT V	CAA K	AGA E	AA C <u>T</u>	G	TTA Y CD-	F_	TTT F	TAT I	ATA Y	TGG G	TCA Q	GGTT V	540 180
541 181	TTA L	ΤΑΤ <i>/</i> Υ -	<u>Г</u> D	ATAA <u>K</u> CD - V		CTA Y				ACA <u>H</u>	TCT L	AAT I	Q		K	GAA <u>K</u>		CCA H	TGTC V	600 200

Neutrokine- α SV

601 201 C	TTTGGGGATGAATTGAGTCTGGTGACTTTGTTTCGATGTATTCAAAATATGCCTGAAACA <u>F G</u> D E L S <u>L V T L F R C I Q N M P</u> E T D-VIII CD-VIII	660 220
661 221	CTACCCAATAATTCCTGCTATTCAGCTGGCATTGCAAAACTGGAAGAAGGAGATGAACTC L P N N <u>S C Y S A G</u> I A K <u>L E E G D E L</u> CD-IX CD-X	720 240
721 241	CAACTTGCAATACCAAGAGAAAATGCACAAATATCACTGGATGGA	780 260
781 261	GGTGCATTGAAACTGCTGTGACCTACTTACACCATGTCTGTAGCTATTTTCCTCCCTTTC G A L K L CD-XI	840 266
841	TCTGTACCTCTAAGAAGAAAGAATCTAACTGAAAATACCAAAAAAAA	900
901	AAA 903	

FIG.5B



S α > S ۵ S ш \leq α ۵. S > ပ ш \leq \leq $\mathbf{\Sigma}$ ш ш α \checkmark \leq __ ပ S \propto S Q ш \simeq ш S Alpha M D D Neutrokine-

41

200 170 139 114 A H S B D L \times \circ \circ \circ ■~ > × 5 0 S $\mathbf{\omega}$ пΩ \times \circ . M A O Z ы o a s SEGA SARZ

2288 ~ ~ _ عا عا SADA J 55 >> > 2 × B V S **⊢** \simeq エ SO $\propto \propto |-$ ⋖ م

FIG. 7A-1

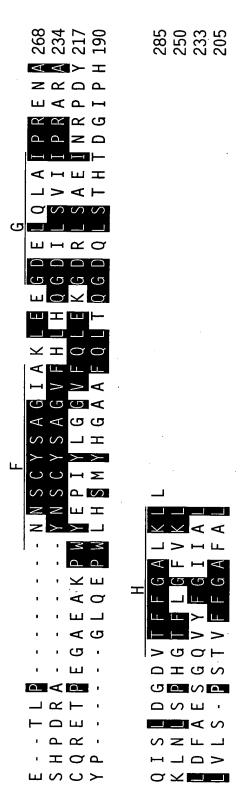
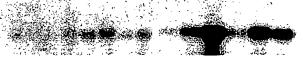


FIG.7A-2

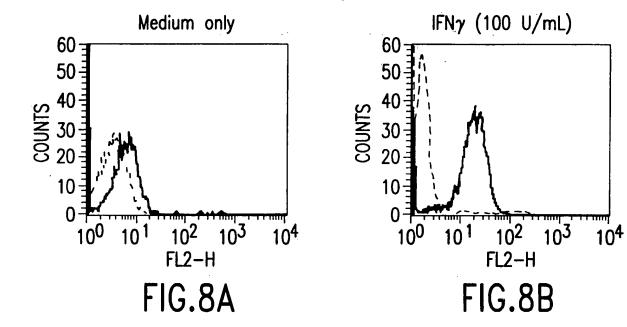


4.4 kb2.4 kb

Spleen
Lymph Node
Thymus
PBL
Bone Marrow
Fetal liver
Heart
Brain
Placenta
Lung
Liver
S. Muscle
Kidney
Pancreas

HL-60 HeLa K-562 MOLT-4 Raji

FIG.7B



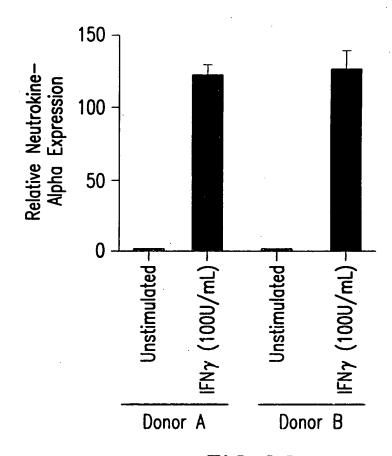
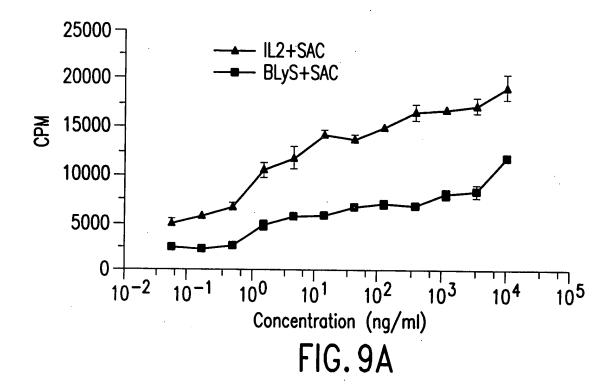
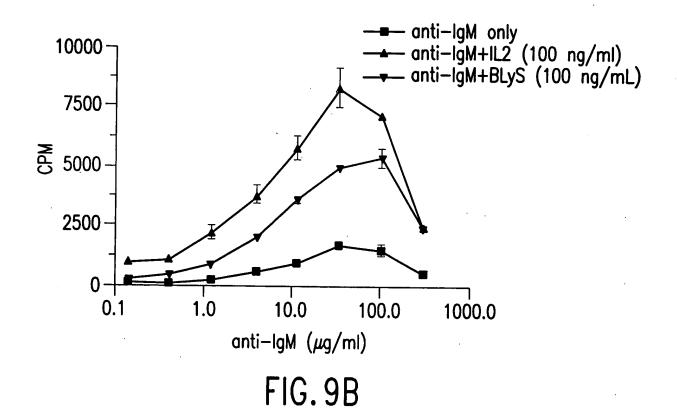
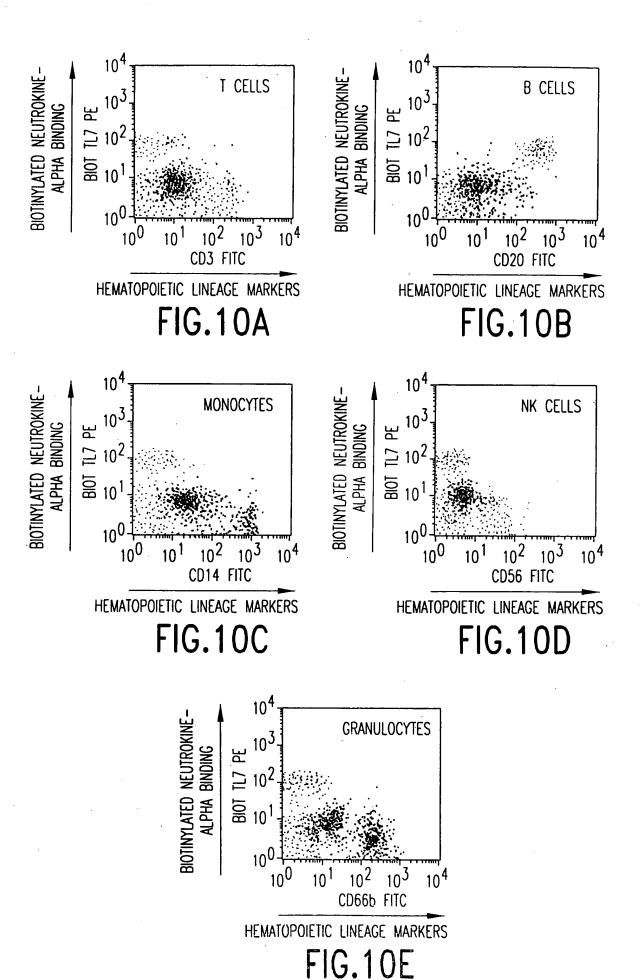
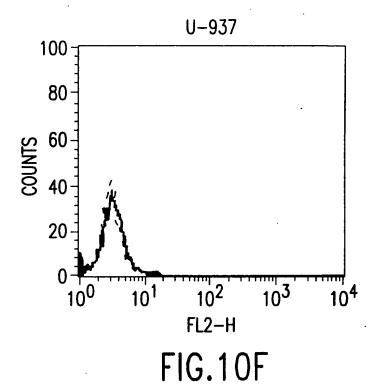


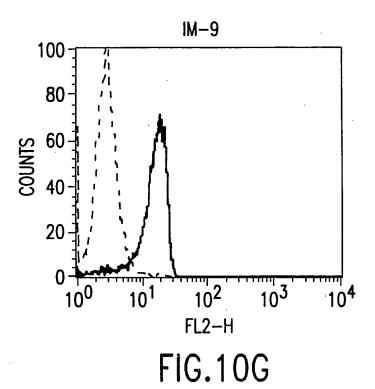
FIG.8C











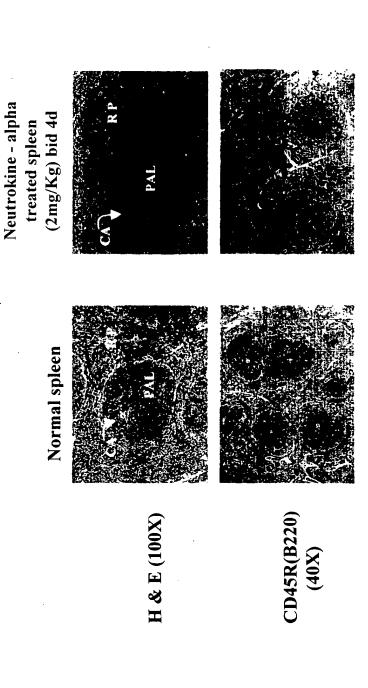


FIG.11A

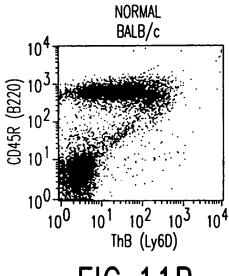


FIG. 11B

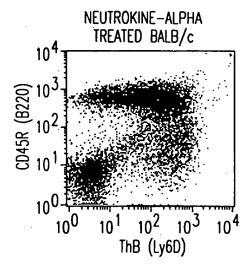


FIG. 11C

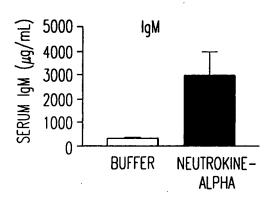


FIG. 11D

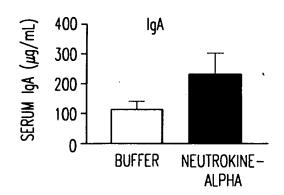


FIG. 11E

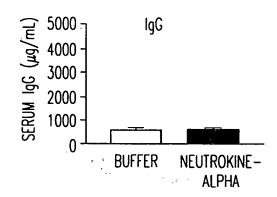


FIG. 11F